



MAYOR AND COUNCIL AGENDA

NO. 4

DEPT.: Recreation and Parks /CPDS
STAFF CONTACT: Burt Hall/Nate Wall

DATE PREPARED: 5/24/05
FOR MEETING OF: 6/20/05

SUBJECT: Tree Management in Rockville's Forest Preserves – Policy Recommendations

RECOMMENDATION: Staff recommends adoption of the policies for Tree Management in Rockville's Forest Preserves, as recommended by the Commission on the Environment, with the two minor amendments recommended by the Recreation and Park Advisory Board, which also serves as the City's Tree Board.

DISCUSSION: The Commission on the Environment (EC) was directed to look at this issue by the Mayor and Council in response to an incident in which a number of trees were cut down by the City in the Upper Watts Branch Forest Preserve for reasons of safety. These trees were inspected by the City's Forestry Crew Leader, who is a Maryland Licensed Tree Care Expert, and determined to be in hazardous condition, meaning that either the entire tree or major limbs had the potential of falling and injuring park visitors using the adjacent trail. This is a fairly narrow unimproved trail in the preserve that receives moderate use. A number of citizens felt that an excessive number of trees were cut down, and that the procedures used (which included the use of a Bobcat skid steer loader for removal) resulted in additional environmental damage to the area. Staff determined that use of the Bobcat was necessary in order to protect the safety of the tree crew performing the work on a large, leaning tree. Part of the citizen's unease arose from lack of communication from the City that the tree removal activity was to take place.

The EC held a meeting with City staff responsible for tree management, a representative of the Recreation and Park Advisory Board, and citizens from College Gardens where the incident took place. As a result of these discussions and further research, EC members believe that there is a need for a clear policy on, and procedure for, maintenance and removal of hazardous trees within forest preserves. The EC's recommended policy is attached.

The Chairperson of the Recreation and Park Advisory Board (RPAB) participated in the EC's meeting and the full Board, which also serves as the City's Tree Board, reviewed and discussed the EC's policy recommendations at their March 24, 2005 meeting. The RPAB made recommendations for two amendments to the EC's policy, based on recommendations from the Recreation and Parks Department staff. These recommendations are contained in the memo (attached) from the board to the Mayor and Council.

Fiscal Impact: none

Change in Law or Policy: These policies establish more formal policies for documenting hazardous tree removals, notifying adjacent neighborhoods, seeking citizen input on tree removals, and annual analysis and reporting of tree management activities in City Forest Preserves.

Boards and Commissions Review: These policy recommendations were written by the Commission on the Environment, after meeting with representatives from the Woodley Gardens and College Gardens Civic Associations and City staff. A representative of the Recreation and Park Advisory Board attended and participated in the Commission on the Environment meeting. Subsequently, the Recreation and Park Advisory Board, which also serves as the City's Tree Board, reviewed the policies and made recommendations to the Mayor and Council for two amendments.

Next Steps: City staff has been conducting tree management activities in the Upper Watts Branch Park Forest Preserve according to the recommended policies, on a pilot basis. If the policy is adopted by the Mayor and Council, City staff will immediately implement the recommendations on a City-wide basis.

PREPARED BY: Burt Hall, Director of Recreation and Parks

Burt Hall 6/14/05

APPROVE:

Scott Ullery
Scott Ullery, City Manager

6/14/05
Date

LIST OF ATTACHMENTS:

- Tree Management in Rockville's Forest Preserves: Recommendations of the Rockville Commission on the Environment
- Memo from the Recreation and Park Advisory Board
- Chart – Trail-side Hazardous Tree Practices and Policies of Various Government Agencies
- Using the Hazard Rating – Excerpt from A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas; International Society of Arboriculture, 1994.

TITLE: TREE MANAGEMENT IN ROCKVILLE'S FOREST PRESERVES:
RECOMMENDATIONS OF THE ROCKVILLE COMMISSION ON THE
ENVIRONMENT

ISSUE: Although Rockville has a policy in place regarding the preservation of forested areas within the City boundaries and has designated eleven "forest preserves," there does not appear to be sufficient tree management procedures for maintenance (trimming) and removal of hazardous trees along unmarked and unpaved trails within these preserves.

BACKGROUND: The Commission on the Environment (EC) was directed to look at this issue by the Mayor and Council in response to an incident where a number of trees were cut down by the City in the Upper Watts Branch Forest Preserve for reasons of safety. These trees were along unmarked, narrow paths in the preserve. A number of citizens felt that an excessive number of trees were cut down, and that the procedures used (which included the use of a Bobcat skid steer loader for removal) resulted in additional environmental damage to the area. Part of the citizen's unease arose from lack of communication from the City that the tree removal activity was to take place. The EC held a meeting with City staff responsible for tree management, a representative of the Parks and Recreation Advisory Board, and citizens from College Gardens where the incident took place. As a result of these discussions and further research, EC members believe that there is a need for a clear policy on, and procedure for, maintenance and removal of hazardous trees within forest preserves.

RECOMMENDATIONS TO THE MAYOR AND COUNCIL:

1) Application

These recommendations for tree management procedures address only unpaved and unmarked trails within the 11 designated "forest preserves". They are not intended for application to trees: along paved or marked trails within forest preserves, adjacent to streets, sidewalks and structures such as houses, sheds and decks; in parks; or along City streets.

2) Procedures – Once the City becomes aware of a potentially hazardous tree, the procedures outlined below should be followed.

a) Tree Hazard Rating

The City Forester (or other City-appointed certified arborist or Maryland licensed tree care expert) should inspect the suspect tree. During this inspection, a "tree hazard evaluation form" must be completed to provide documentation on the condition of the tree. If other potentially hazardous trees are identified during this inspection, a tree hazard evaluation form must be filled out for each tree slated for maintenance or removal.

b) Imminent Hazard

For trees posing an imminent hazard (i.e., scoring an 8 or higher out of 12 on the tree hazard evaluation form), immediate removal may be necessary. In these cases, the tree hazard evaluation form must be accompanied by photo documentation providing additional justification on why immediate removal was required.

c) Notification

- i) Any potentially hazardous tree not removed as an imminent hazard should be added to a "watch-list" for re-inspection at some specified time in the future.
- ii) Written notification of the number and location of the tree(s) added to the watch-list should be provided to the local civic association(s). Included in this notification should be a copy of the hazard tree evaluation form(s), the proposed methodology for maintenance or removal (incorporating the requirement for low-impact procedures that minimize disturbance like those often utilized for stream restoration projects), and instructions for citizen comments (*see Paragraph 3*).
- iii) In the case of trees removed as imminent hazards, the local civic association(s) should be notified that tree removal activities occurred, and appropriate photo documentation should accompany the tree hazard evaluation form(s).
- iv) If appropriate, tree replacement recommendations, based on the opinion of the City Forester (or other City-appointed certified arborist or Maryland licensed tree care expert), should also be made at this time.

3) Citizen Comments / Suggestions

Citizens may make comments or suggestions to the City concerning the actual removal, the methodology employed for that removal, or the tree replacement recommendation. The City will document any citizen comments, and take them into account during any future removal or replanting activities.

4) Annual Report

City staff will prepare an annual report addressing city forestry issues, including best practices, recommendations for improved management, and a summary of the issues that have been addressed in the past year and plans for the upcoming year. The report should be forwarded to the Mayor and Council, Environment Commission, and the City Parks Advisory Board.



City of Rockville

MEMORANDUM

April 7, 2005

TO: The Mayor and Council

FROM: Recreation and Parks Advisory Board, Chip Boylan, Chairperson

SUBJECT: Forest Preserves

At the March 24, 2005 Recreation and Park Advisory Board meeting, the Board had the opportunity to review the Commission on the Environment's recommendations for management of Forest Preserves. The Board is familiar with the establishment and current management practices within the Forest Preserves. Staff from the Parks Division made the following recommendations to the Board:

"The Forestry Division had the opportunity to review and comment on the draft prepared by the Rockville Commission on the Environment. The final report addresses many of the concerns staff had with the initial draft. For example, they have removed the appeals process, streamlined the procedure for dealing with imminent hazard trees, and removed the language recommending limited inspections. The final report did add the requirement for annual reports, which will require some additional work by Forestry staff; we are, however, comfortable with the requirement.

There are two sections where we recommend amendments to the policy:

1. Under the Application section, Forestry staff recommends the application be applied based on the level of interest from adjacent communities. The Forestry Division will send a letter to the civic associations adjacent to each Forest Preserve area to determine if the association wants to be included in the notification procedures. Civic associations that express interest will be notified in the future of tree management activities in the adjacent Forest Preserve.
2. Under the Imminent Hazard section, we recommend that immediate removal occur for trees scoring a 7 or higher.

To: The Mayor and Council
Page 2
April 7, 2005

The Forestry Division's recommendation to the Recreation and Park Advisory Board is to support the proposal with the additional recommendations, as stated above."

The Board applauds the efforts by the Environmental Commission and staff to address an issue raised by community members. The Board has complete confidence in the professionalism and qualifications of the Forestry staff. As a representative of the Recreation and Park Advisory Board, I attended one of the Commission's meetings at which they interviewed staff and community representatives. Based on what I heard and the report created by the Commission, I believe a reasonable procedure has been created for the management of trees in Forest Preserves.

The Recreation and Park Advisory Board unanimously supports the Environmental Commission's report with the minor amendments recommended by the Forestry Division.

Trail-side Hazardous Tree Practices and Policies of Various Government Agencies

Agency	Contact Name and title	Practice/policy
National Park Service C & O Canal National Park	Bob Hartman, Chief of Maintenance 301-739-4200	Inspect towpath two times per week; inspect other woodland trails once per year. Fell hazardous trees within striking distance of trail and grind stumps. Remove any cut logs within site of the trail. See attached document The US Park Service Hazardous Tree Guidelines
National Forest Service Lee Ranger District/ George Washington National Forest	Jim Smalls, District Ranger	Inspect high use trails yearly and fell any hazardous tree within striking distance of trail; leave wood to decay. No written policy for southern region; See attached document for Rocky Mountain Region
Maryland Department of Natural Resources, State Parks Cunningham Falls State Park, Gambrill State Park	Cindy Ecker, Park Manager 301-271-7574 Ranger Fabien, Ranger	State Parks, Natural Environment Areas, and State Wildlands: fell hazardous trees within striking distance of trails according to findings of weekly inspections and in response to citizen complaints. Felling of trees having active nesting cavities may be delayed depending on circumstances. See attached for example for Chapman State Park and Natural Environment Area
Maryland National Park and Planning Commission; Montgomery County Maryland	Eugene Rose, Arborist 301-650-2614	Inspect yearly and fell hazardous trees within striking distance of trails; leave wood to decay No written policy
Greenbelt Forest Preserve; Greenbelt, Maryland	Bill Phalen, Horticulturist	No current policy; considering posting "Enter at your own risk" signs
Seattle Department of Recreation and Parks; Seattle, Washington	Mark Mead, Senior Urban Forester	Remove trees, which have failed and are hanging over trails. See attached document for additional information on hazardous trees
Dupage Forest Preservation District Dupage County, Illinois	Jerry Potempa, Preserve Maintenance Supervisor 630-933-7200 cell 630-738-7316	Certified arborist inspects and declares trees to be hazardous; fell trees within striking distance of trail; may remove if considered an eyesore. No written policy.
Fairfax County Park Authority, Lake Accotink Park; Fairfax County Virginia	Julie Tahan, Assistant Manager 703-569-3464	Fell hazardous trees that are near trails or anywhere that public safety is a concern. The felled trees are left there to serve as animal habitat whenever feasible.

A PHOTOGRAPHIC GUIDE TO THE EVALUATION OF HAZARD TREES IN URBAN AREAS

Section 5

Using the Hazard Rating

EVALUATING AND USING HAZARD RATINGS

The goal of the hazard evaluation process is to assess the danger and risk associated with a tree. By conducting a systematic, thorough evaluation, the parts of the tree that are likely to fail are identified so that they can then be treated to reduce the hazard. For situations where appropriate treatments will be applied to all trees, there is no need to assign a hazard rating. The goals of the inspection are fulfilled solely by performing the inspection and recording observations on the EVALUATION FORM. This is most commonly the case for commercial arborists, although there may be cases when hazard ratings would be helpful for communicating the risk associated with individual trees to the client. For the most part, however, a numerical rating is of little value to a homeowner who simply wants a safe environment.

In other cases, a manager may be confronted by multiple locations, evaluators and a large number of trees. For these situations, hazard ratings define the seriousness and extent of potential danger to site users. They assign a level of risk to activity in and around individual trees. For trees where the hazard rating is 3, there is less concern about hazard than for trees with ratings of 12. Clearly, the greater the hazard rating, the greater the risk associated with a tree.

For municipal and utility arborists hazard ratings help prioritize work. Obviously, all the trees within a city or along hundreds of miles of right-of-way cannot receive a high level of care and treatment. There are simply too many trees and limited time and resources. What the manager can do, is to separate out those trees in greatest need of care and attend to them first. The hazard rating provides a way to do this. A typical approach would be to sort out the trees rated 11 and 12, abate their hazards, then work down the scale as resources allow. For example, the bigleaf maple (Case History 1) and peachleaf willow (Case History 3) would receive treatment before the black locust (Case History 2) because they have higher hazard ratings. However, the valley oak (Case History 5) required immediate attention.

Hazard ratings do not define "danger." Certainly trees with ratings of 12 may be considered more dangerous than those with ratings of 3. However, a tree does not become dangerous at a given rating. Put another way, "danger" does not begin at a rating of 5 or 6 or 7. From our perspective, assessing whether or not a tree is dangerous is largely dependent upon the context.

Since hazard ratings consider the nature of the failure, its potential for injury and the target, ratings with the same value will have different character. For example, a rating of 8 might result from these situations: (1) a large tree with a large trunk cavity but with a minor target ($4 + 3 + 1$), and

(2) long, small-diameter branches that are weakly attached below a decayed heading cut in the crown of a tree overhanging a heavily used area ($1 + 3 + 4$). Since the components which made up the rating are different, treatment may differ as well.

Thus, hazard ratings cannot strictly define a numerical line for action, between either removal and retention or treatment and no treatment. This must be an administrative decision, one made by owner and manager. In municipal situations, where an agency might manage a very large number of trees, there may be practical limits to the amount of work that can be undertaken and only the most severe and significant hazards may be addressed. Some level of risk will always be present when people live among trees. The decision of how much risk is tolerable remains with the owner and manager.

ABATEMENT OPTIONS

Abatement of hazard involves consideration of both tree and target. Choice of one or more abatement options is a function of the individual situation. There is a clear difference among residential sites, parking lots, picnic areas and hiking trails as targets. Similarly, specimen trees and residual forest stands are also different.

Development of abatement options should be as systematic as development of the ratings, considering the nature of the site, tree and target. Treatment of hazardous situations is framed by the nature of the individual situation. For example, trees in imminent danger of failure and targets that cannot be moved restrict the range of possible abatement options. Hazards which result from deadwood and hangers in the crown can be abated by crown clean pruning. Alternatively, cable/bracing and/or reduction of end weight may be required when the most likely failure is that of large scaffolds. Where the hazard is posed by a tree in decline, there may be few abatement options and removal may be the only choice.

The TREE HAZARD EVALUATION FORM includes comments on hazard abatement, including standard procedures of target removal, pruning, cable bracing and tree removal. In addition, the FORM considers the effect of abatement on adjacent trees. While simple pruning may not impact other trees in a group, removal may open up the group to an extent that increases hazard associated with the residual trees.

Abatement actions must deal with all hazards in the tree, not just be most likely failure. Following the application of abatement procedures, a follow-up evaluation should occur, for the hazard associated with a tree will have changed.